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Conference Abstract

Royal Botanic Gardens, Kew's Seed Information Database (SID): A compilation of taxon-based biological seed characteristics or traits

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Abstract

The Seed Information Database (SID) is one of the Royal Botanic Gardens (RBG), Kew's strategic databases in the public domain (http://data.kew.org/sid). SID is a compilation of taxon-based information on a range of biological seed characteristics or traits for about 52,564 seed plant taxa. Assembling and mobilizing such data involved challenges in establishing data standards for specific seed traits and taxonomy and integrating data sets from different sources. Data are derived from seed collections stored at the RBG Kew's Millennium Seed Bank (MSB) and from other published and unpublished sources. Seed traits data available in SID includes (number of records in brackets): storage behaviour (24,926), seed weights (86,287) seed dispersal (5,377), germination (54, 453), oil content (4,526), protein content (3,603), morphology (599), morphology images (1,741), halophytes (1,546) and viability constants (72). Database can be searched for any, or all of these categories by clade, order, family, genus, or species. SID also offers various online tools useful for *ex situ* seed conservation and storage (e.g. seed viability equation to predict the proportion of seeds in a population that are viable after any period of storage in a wide range of environments). SID data has been used by a wider community (general public, researches, conservationists, policymakers, etc.) in a range of disciplines including biodiversity conservation, food security, climate change, agriculture, and seed industry

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across the globe for large-scale analysis, modelling, predicting, or describing plant seed traits.

Keywords

Seed Information Database, SID, Seed Traits

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Hosting institution

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